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96. (Newly added) The storage medium as set forth in Claim 95 further comprising adjusting distances between adjacent holographic pixels to indicate additional characteristics of said image data corresponding to said adjacent holographic pixels.

97. (Newly added) The storage medium as set forth in Claim 96 wherein converting comprises obtaining said image data in correspondence to pixels of said image.

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**REMARKS**

**Procedural Posture**

Claims 89, 90 and 91 are pending in the application. Claims 92 – 97 have been newly added.

**Additional Specification**

Additional text has been added to the Specification at page 25. Entry thereof is respectfully requested. The additional text is directed to the present invention embodied in the form of computer-implemented processes and apparatuses for practicing those processes. Such embodiment specifically finds support with the repeated reference to the central processing unit 4 at page 8 line 24 – page 24 line 35, and at reference numeral 4 in Figures 1, 3, 4, 8, and 9 and the Specification as filed.

**Additional Claims**

New Claims 92 – 97 have been added. Entry thereof is respectfully requested. Applicants believe that the subject matter of new Claims 92 - 97 finds support at reference numeral 4 in Figures 1, 3, 4, 8 and 9 in the Specification as filed and is clearly

patentable over the cited prior art and stand in condition for allowance. Notification of that fact is respectfully requested.

Care has been taken that no new matter has been added to the present application due to these amendments.

Applicants believe that the Amendments and Remarks of this Supplemental Response, in conjunction with the Terminal Disclaimer and Petition under 37 CFR 1.48(b) filed in the October 3, 2001 Response, fully address all of the objections and concerns of the Examiner in this application, and that pending Claims 89, 90 and 91, and newly added Claims 92 - 97 stand in condition for allowance.

If the Examiner believes that a telephone conference with Applicant's attorneys would be advantageous to the disposition of this case, the Examiner is invited to telephone the undersigned.

If there are any additional charges with respect to this response or otherwise, please charge them to Deposit Account No. 06-1130 maintained by applicant's attorney.

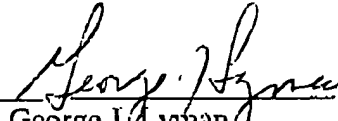
Respectfully submitted,  
DAVIS, F. ET AL

CANTOR COLBURN LLP  
Applicant's Attorneys

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OCT 08 2001

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## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: DAVIS, F. )  
Serial No: 09/168,585 ) Group Art Unit  
Filed: October 10, 1998 ) 2507  
For: SYSTEM FOR MAKING A HOLOGRAM ) Before the  
OF AN IMAGE BY MANIPULATING ) Examiner:  
OBJECT BEAM CHARACTERISTICS TO ) R.Shafer  
REFLECT IMAGE DATA

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Marked up version to show corrections:Marked up version of page 25 of the Specification follows:

As described above, the present invention can be embodied in the form of computer-implemented processes and apparatuses for practicing those processes. The present invention can also be embodied in the form of computer program code containing instructions embodied in tangible media, such as floppy diskettes, CD-ROMs, hard drives, or any other computer-readable storage medium, wherein, when the computer program code is loaded into and executed by a computer, the computer becomes an apparatus for practicing the invention. The present invention can also be embodied in the form of computer program code, for example, whether stored in a storage medium, loaded into and/or executed by a computer, or transmitted over some transmission medium, such as over electrical wiring or cabling, through fiber optics, or via electromagnetic radiation, wherein, when the computer program code is loaded into and executed by a computer, the computer becomes an apparatus for practicing the invention. When implemented on a general-purpose microprocessor, the computer program code segments configure the microprocessor to create specific logic circuits.

Although a number of arrangements of this invention have been mentioned by way of example, it is not intended that the invention be limited thereto. Accordingly, the invention should be considered to include any and all configurations, modifications,

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variations combinations equivalent arrangements or expansions falling within the scope of the following claims.

Newly added Claims 92-97 follow:

92. (Newly added) A method of converting image data into a holographic pattern formed from a plurality of discrete holograms each constituting a holographic pixel and having diffraction gratings comprising:

converting said image data into digital form having a plurality of digital data characteristics;

manipulating a laser beam according to said digital data characteristics by splitting said laser beam into a reference beam and at least one object beam;

irradiating a profileable surface with said reference beam and said at least one object beam to sequentially form each of said holograms as a holographic pixel, each of said holographic pixels having a distinct interference pattern, said interference pattern of each holographic pixel having characteristics of a corresponding discrete portion of said image data.

93. (Newly added) The method as set forth in Claim 92 further comprising adjusting distances between adjacent holographic pixels to indicate additional characteristics of said image data corresponding to said adjacent holographic pixels.

94. (Newly added) The method as set forth in Claim 92 wherein said means for converting comprise means for obtaining said image data in correspondence to pixels of an image.

95. (Newly added) A storage medium encoded with machine-readable computer program code, the computer program code including instructions for causing an

electro-optic system to implement a method of converting image data into a holographic pattern formed from a plurality of discrete holograms each constituting a holographic pixel and having diffraction gratings, the method comprising:

converting said image data into digital form having a plurality of digital data characteristics;

manipulating a laser beam according to said digital data characteristics by splitting said laser beam into a reference beam and at least one object beam;

irradiating a profilable surface with said reference beam and said at least one object beam to sequentially form each of said holograms as a holographic pixel, each of said holographic pixels having a distinct interference pattern, said interference pattern of each holographic pixel having characteristics of a corresponding discrete portion of said image data.

96. (Newly added) The storage medium as set forth in Claim 95 further comprising adjusting distances between adjacent holographic pixels to indicate additional characteristics of said image data corresponding to said adjacent holographic pixels.

97. (Newly added) The storage medium as set forth in Claim 96 wherein converting comprises obtaining said image data in correspondence to pixels of said image.